

Name: _____

Student Number: _____

AEROSPACE ENGINEERING										2017-2018					
Cr. Hrs.	SEM 1	Cr. Hrs.	SEM 2	Cr. Hrs.	SEM 3	Cr. Hrs.	SEM 4	Cr. Hrs.	SEM 5	Cr. Hrs.	SEM 6	Cr. Hrs.	SEM 7	Cr. Hrs.	SEM 8
4	MATH 1220 or 1700 Calculus I	4	MATH 1230 or 1710 Calculus II	4	MATH 2720 Multi-Variable Calculus	4	MATH 3740 Differential Equations	4	AE 3610 Aerodynamics I (L) (F)	3	AE 3710 Aerodynamics II (Sp)	3	AE 4600 Aircraft Stability & Control (F)	3	AE 4690 Aircraft Design (Sp)
	<small>MATH 1180 ≥ C or placement</small>		<small>MATH 1220 or 1700 ≥ C</small>		<small>MATH 1230 or 1710 ≥ C</small>		<small>MATH 2720 ≥ C</small>		<small>MATH 2720 ≥ C</small>		<small>AE 3610 ≥ C</small>		<small>AE 3710 ≥ C</small>		<small>AE 4600 ≥ C</small>
									<small>PHYS 2050+2060 ≥ C</small>		<small>MATH 3740 ≥ C</small>		<small>ME 3600 ≥ C</small>		<small>AE 3800 ≥ C</small>
									<small>AE 2610 or ME 3560 ≥ C</small>		<small>ME 2580 ≥ C</small>				
3+1	CHEM 1100+1110 Chemistry I (L)	4+ 1	PHYS 2050+2060 University Physics I (L)	4+1	PHYS 2070+2080 University Physics II (L) (F, Sp, Su2)	3	ME 2570 Mechanics of Materials (F,Sp)	3	ME 3600 Control Systems (F, Sp, Su1)	3	AE 3800 Flight Vehicle Performance (Sp)	3	AE 4630 Aircraft Structural Design (F)	3	AE 4760 Aerospace Propulsion II
	<small>MATH 1110 ≥ C or placement</small>		<small>MATH 1220 or 1700 ≥ C</small>		<small>PHYS 2050 ≥ C</small>		<small>ME 2560 ≥ C</small>		<small>ME 2580 ≥ C</small>		<small>AE 3710 ≥ C or taking concurrently</small>		<small>ME 2570 ≥ C</small>		<small>AE 4660 ≥ C</small>
			<small>MATH 1230 or 1710 ≥ C or taking concurrently</small>		<small>MATH 1230 or 1710 ≥ C</small>				<small>MATH 3740 ≥ C</small>						
					<small>MATH 2720 or 2300 ≥ C or taking concurrently</small>				<small>ECE 2100 ≥ C</small>						
3	EDMM 1420 Engineering Graphics (L) (F, Sp)	3	AE 2610 Intro to Aerospace Engineering (F, Sp)	3	ME 2320 Thermodynamics I (F, Sp, Su1)	4	ECE 2100 Circuit Analysis I (L) (F, Sp, Su1)	3	ME 3620 Theory of Engineering Experimentation (F, Sp)	3	ME 3350 Instrumentation (L) (F, Sp, Su1)	3	AE 4660 Aerospace Propulsion I (F)	3	ME 4800 Aero Engineering Project (L) (F, Sp)
			<small>PHYS 2050 + 2060 ≥ C or taking concurrently</small>		<small>MATH 1230 or 1710 ≥ C</small>		<small>MATH 1230 or 1710 ≥ C</small>		<small>MATH 1230 or 1710 ≥ C</small>		<small>ME 2570 ≥ C</small>		<small>ME 2320 ≥ C</small>		<small>ME 4790 ≥ C</small>
					<small>PHYS 2050/2060 ≥ C</small>		<small>PHYS 2070 ≥ C or taking concurrently</small>		<small>CS 1060 or CS 1022 or CS 1023 or CS 1110 ≥ C</small>		<small>ME 3620 ≥ C</small>		<small>ME 3560 or AE 3710 ≥ C</small>		<small>Group 2 elec or AE 4500 or AE 4600 ≥ C</small>
											<small>ECE 2100 ≥ C</small>				
											<small>Writing Requirement ≥ C</small>				
3	IEE 1020 Technical Communication (F, Sp, Su1 or Su2)	3	CS 1200 Programming in C for Engineers (L) (F, Sp)	3	ME 2560 Statics (F, Sp, Su1)	3	ME 2580 Dynamics (F, Sp, Su1)	3	GEN ED III* U.S. Cultures & Issues	3	AE 4700 Orbital Mechanics (Sp)	3	Aerospace Elective (See page 2)	3	Aerospace Elective (See page 2)
	<small>ENGL 1000 ≥ C or placement</small>				<small>MATH 1230 or 1710 ≥ C</small>		<small>ME 2560 or 2530 ≥ C</small>				<small>ME 2580 ≥ C</small>		<small>ME 2580 ≥ C</small>		
					<small>PHYS 2050/2060 ≥ C</small>		<small>PHYS 2050/2060 ≥ C</small>								
2	GEN ED VIII* Health & Well Being	3	GEN ED II* Humanities	3	GEN ED V* Social/Behavioral Science	3	CHEM 1120 Chemistry II	3	GEN ED IV* Other Cultures & Civilizations	4	GEN ED I* Fine Arts	1	ME 4790 Aero Engineering Project planning (F, Sp, Su1)	3	Aerospace Elective (See page 2)
							<small>CHEM 1100 and 1110 ≥ C</small>						<small>ME 3350 ≥ C</small>		
							or						<small>ME 3600 ≥ C</small>		
													<small>AE 4600 or AE 4630 ≥ C or taking concurrently</small>		
							4	PHYS 3090 Introductory Modern Physics							
								<small>PHYS 2070 ≥ C</small>							
								<small>MATH 2300 or 2720 ≥ C</small>							
	16 hours		18 hours		18 hours		17-18 hours		16 hours		16 hours		13 hours		15 hours
															128 hours total

NOTES: Prerequisite courses are shown in smaller print.

* See your academic advisor for General Education requirements.

50 Cr. Pre-Engineering Req.

56 Cr. AE Req.

14 Cr. Gen Ed Req.

9 Cr. AE Elective Req.

A 'C' or better is required for
admission to upper level CEAS courses

AEROSPACE ENGINEERING ELECTIVES--SELECT THREE OF THE FOLLOWING

Thermal/Fluid Science									
3	AE 5200 Advanced Aerodynamics	3	ME 4310 Heat Transfer	3	ME 4320 Thermodynamics II	3	ME 5300 Theoretical & Computational Fluids	3	ME 5450 Computational Fluid Dynamics I
	AE 3710 ≥ B		ME 2320 ≥ C		ME 2320 ≥ C		ME 3560 or AE 3710 ≥ B		ME 3560 or AE 3710 ≥ B
			ME 3560 or AE 3710 ≥ C		ME 3560 or AE 3710 ≥ C or taking concurrently				CS 2010 ≥ B

Structures/Material Science							
3	AE 5100 Foundations of Structural Mechanics	3	ME 4570 Experimental Solid Mechanics	3	ME 5610 Finite Element Method	3	ME 5690 Principles of Fatigue & Fracture
	AE 4630 ≥ B		ME 3350 ≥ C		ME 2570 ≥ B		ME 3650 or AE 4630 ≥ B
			ME 3650 or AE 4630 ≥ C		ME 3560 ≥ B		
					ME 4310 ≥ B		
					MATH 3740 ≥ B		

Flight Dynamics & Control									
3	AE 4590 Flight Test Engineering & Design	3	AE 5400 Aerospace Vehicle Dynamics	3	ME 4710 Motion & Control	3	ME 5410 Continuous System Modeling & Simulation	3	ME 5430 Mechanical Systems Control
	AE 4600 ≥ C		ME 2580 ≥ B		ME 3600 ≥ C		ME 3600 ≥ B		ME 3600 ≥ B
			ME 3600 ≥ B						

System/Component Design		
3	ME 3650 Machine Design	
	EDMM 1420 ≥ C	
	ME 2570 ≥ C	
	ME 2580 ≥ C	
	ME or AE 2500 ≥ C	
	ME 2615 or AE 2610 ≥ C	